



UNION CARBIDE CORPORATION  
METALS DIVISION  
LA SAL, UTAH 84530  
Telephone 801-686-2228

February 18, 1983

Mr. Fredrick C. Pehrson, P.E., Chief  
Permits and Compliance Section  
Bureau of Water Pollution Control

Dear Mr. Pehrson:

In response to your letter of January 19, 1983 requesting more information regarding Union Carbide's Hecla Shaft retention ponds, I hope the following will be of help.

Because of the current depressed state of the uranium market, Union Carbide ceased mining at the Hecla Shaft in mid December of 1982 and placed the mine on an inactive status pending the return of more favorable economic conditions in the future.

Shaft de-watering will continue on a twenty-four hour daily basis with an approximate flow rate of 65 gallons per minute. All water is pumped to and held in three retention ponds with no point of discharge (see map attached). The three interconnecting holding ponds were constructed in 1981 and have an estimated capacity of 2.1 million gallons. These ponds were excavated to varying depths in a fine sandy loam alluvial soil complex and bottomed on cretaceous Mancos Shale of unknown thickness. Berm slopes vary from approximately 1.5 H : 1 V to 3.5 H : 1 V, and give a high water level freeboard of 3.5 to 15 feet.

Union Carbide's potable water well located approximately 600 feet to the west and north of the pond's location is producing good quality domestic water from the Dakota Sandstone at a depth of 160 to 190 feet. The Utah State Well Drillers report indicate approximately 60 feet of Mancos Shale over lying the aquifer. Other local exploration drilling information indicate the area-wide presence of the Mancos Shale, with no other known aquifers above this or the Dakota Sandstone.

RECEIVED  
FEB 24 1983

DIVISION OF  
OIL, GAS & MINING



Page 2

I hope the above will prove helpful and answer your concerns. If we can be of further help or provide an on-site visit please do not hesitate to call either myself or Bruce Greene at this location.

Sincerely,



Kent Dahlquist  
Mine Engineer

cc: Mr. Sandy Pruitt  
Division of Oil, Gas & Mining  
Southeastern Utah District Health Department

Mr. Niels B. Haubold  
Union Carbide Corporation  
Grand Junction, Colorado